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ABSTRACT

The present invention relates to a preparation method for a lithographic printing plate, which comprises forming a presensitized plate by coating a photosensitive layer or thermosensitive layer on an aluminum substrate treated with an aqueous solution after optionally anodized and developing the presensitized plate with a developer comprising no silicate, wherein the aqueous solution comprises at least one compound selected from the group consisting of nitrite group-containing compound, fluorine atom-containing compound and phosphorous atom-containing compound, in the proviso that when the at least one compound is fluorine atom-containing compound, the treated aluminum substrate has a surface which satisfies the formula: 0.30 ≤ A/(A+B) ≤0.90 (wherein, A represents peak area of fluorine atom (1S) (counts. eV/sec) determined by X ray Electron Spectroscopy for Chemical Analysis (ESCA), and B represents peak area of aluminum atom (2P) (counts · eV/sec) determined by X ray ESCA), and when the at least one compound is phosphorous atom-containing compound, the treated aluminum substrate has a surface which satisfies the formula: $0.05 \le A/(A+B) \le 0.70$ (wherein, A represents peak area of phosphorous atom (2P) (counts · eV/sec) determined by X ray ESCA, and B represents peak area of aluminum atom (2P) (counts. eV/sec) determined by X ray ESCA).